

LABORATORY PREPAREDNESS FOR EMERGENCIES

Improving the Public Health Laboratory Infrastructure

Prior to 1999, the public health laboratory infrastructure in the United States was on the decline. Most state and local public health laboratories were not capable of rapid molecular testing for biological threat agents. The ones that could test for threat agents were using traditional culture testing methods that take more time to yield results. Because getting test results within hours, not days, is critical in the event of a biological or chemical attack, it was clear that the LRN was needed to improve laboratory capacity in the public health system.

According to an Association of Public Health Laboratories (APHL) survey conducted in 1998, 32% (12 of 38 respondents) of states had public health laboratories designated as Biosafety Level 3 (BSL-3). These laboratories are capable of testing for infectious agents that could cause serious or potentially lethal diseases. The actual number may have been lower because the self-reported figure included laboratories that counted their tuberculosis (TB) testing labs, but did not actually have dedicated space for non-TB BSL-3 activities. Fewer of the laboratories reported the ability to perform rapid molecular tests that provide faster agent identification. Respondents also reported that they lacked trained staff, appropriate facilities, reagents and supplies, and necessary testing instruments. One goal of the LRN is to have at least one BSL-3 laboratory in each state.

Since 1999, funding provided for the LRN has enabled many state and local public health laboratories to renovate their facilities to comply with strict safety and containment standards; allow the purchase of state-of-the-art testing equipment; fund more than 400 laboratory worker positions annually; and provides member laboratories with the necessary supplies to support tests developed by the LRN. Today, LRN laboratories can perform rapid tests for high-priority biological agents that cause anthrax, smallpox, and plague.

For more information, visit www.bt.cdc.gov/lrn or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (español), or (866) 874-2646 (TTY).

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